

Patent Claims:

1. Method for identifying a drop in pressure in the tire of a vehicle,
c h a r a c t e r i z e d in that the detection method operates in dependence on at least one driving dynamics variable.
2. Method as claimed in claim 2,
c h a r a c t e r i z e d in that driving dynamics comprises one or more of the following variables: vehicle speed, longitudinal acceleration, yaw rate, transverse acceleration, steering angle, curve characteristic quantity, wheel acceleration, wheel slip, wheel slip gradient, tire torsion.
3. Method as claimed in claim 1 or 2, wherein a test quantity is determined from an input quantity for the purpose of pressure loss detection,
c h a r a c t e r i z e d in that the input quantity is modified according to the driving dynamics variable.
4. Method as claimed in claim 1 or 2, wherein a test quantity is determined for pressure loss detection,
c h a r a c t e r i z e d in that the test quantity is modified according to the driving dynamics variable.
5. Method as claimed in any one of the preceding claims,
c h a r a c t e r i z e d in that pressure loss detection remains undone when the driving dynamics variable lies outside a predetermined range of values.

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6. Method as claimed in claim 3 or 4,
c h a r a c t e r i z e d in that a modification
quantity is determined during operation of the vehicle and
stored in a non-volatile fashion.
7. Device for identifying a drop in pressure in the tire of a
vehicle, in particular for implementing the method as
claimed in any one of the preceding claims, including a
detection device (11) for pressure loss detection,
c h a r a c t e r i z e d by a modification device (12,
20, 23, 24) which influences the pressure loss detection
in dependence on at least one driving dynamics variable.
8. Device as claimed in claim 7,
c h a r a c t e r i z e d in that the modification
device operates in dependence on one or more of the
following quantities: vehicle speed, longitudinal
acceleration, yaw rate, transverse acceleration, steering
angle, curve characteristic quantity, wheel acceleration,
wheel slip, wheel slip gradient, tire torsion.
9. Device as claimed in claim 7 or 8, wherein the determining
device operates with respect to an input quantity,
c h a r a c t e r i z e d in that the modification
device (23b,c, 24b,c) modifies the input quantity
according to the driving dynamics variable.
10. Device as claimed in any one of claims 7 to 9, wherein the
determining device determines a test quantity,
c h a r a c t e r i z e d in that the modification
device (23a, 24a) modifies the test quantity according to
the driving dynamics variable.

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11. Device as claimed in any one of claims 7 to 10,
c h a r a c t e r i z e d in that the modification
device (20) leaves the pressure loss detection undone when
the driving dynamics variable lies outside a predetermined
range of values.
12. Device as claimed in claim 9 or 10,
c h a r a c t e r i z e d by a non-volatile memory (28)
for storing a modification quantity which is determined
during operation of the vehicle.
13. Method for driving dynamics control,
c h a r a c t e r i z e d in that the control of driving
dynamics is also effected in dependence on a tire pressure
loss detected.
14. Method as claimed in claim 13,
c h a r a c t e r i z e d in that in brake control a
nominal value, and/or a response threshold, and/or a
control algorithm for the brake system is set or changed
in dependence on the loss in tire pressure.
15. Method as claimed in claim 14,
c h a r a c t e r i z e d in that when the wheel with
pressure loss is known, a nominal value for this wheel is
changed.
16. Method as claimed in claim 15,
c h a r a c t e r i z e d in that a nominal value is
changed for another wheel without pressure loss.

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17. Method as claimed in any one of claims 14 to 16,
c h a r a c t e r i z e d in that when the wheel with a
loss in pressure is unknown, a nominal value is changed
for all wheels.
18. Method as claimed in claims 13 to 17,
c h a r a c t e r i z e d in that in traction slip
control a nominal value, and/or a response threshold,
and/or a control algorithm for the brake system, and/or
the engine is set or changed in dependence on the tire
pressure condition.
19. Method as claimed in any one of claims 13 to 18,
c h a r a c t e r i z e d in that the maximum speed of
the vehicle is limited by engine intervention when
pressure loss is detected. *a*
20. Method as claimed in any one of claims 13 to 19,
c h a r a c t e r i z e d in that tire pressure loss
detection is performed by implementing a method as claimed
in any one of claims 1 to 6.
21. Device for driving dynamics control with sensor means, at
least one controller (41), actuation means, and a pressure
loss detection device (42), in particular for implementing
the method as claimed in any one of claims 13 to 20,
c h a r a c t e r i z e d in that the controller
controls the driving dynamics also in dependence on a tire
pressure condition determined by the pressure loss
detection device.

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22. Device as claimed in claim 21,
c h a r a c t e r i z e d in that the controller is a
brake controller which sets or changes a nominal value,
and/or a response threshold, and/or a control algorithm
for the brake system in dependence on the tire pressure
condition.
23. Device as claimed in claim 21 or 22,
c h a r a c t e r i z e d in that the controller is a
traction slip controller which sets or changes a nominal
value, and/or a response threshold, and/or a control
algorithm for the brake system, and/or the engine in
dependence on the tire pressure condition.
24. Device as claimed in any one of claims 21 to 27,
c h a r a c t e r i z e d in that the pressure loss
detection device (42) is configured according to any one
of claims 7 to 12.

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